

**DESIGN METHOD FOR ESSENTIALLY DIGITAL SYSTEMS AND  
COMPONENTS THEREOF AND ESSENTIALLY DIGITAL SYSTEMS MADE  
IN ACCORDANCE WITH THE METHOD**

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Abstract of Disclosure

The present invention relates to the design of essentially digital systems and components. In one embodiment, a parameterized model of a sub-component of an essentially digital system is provided. This sub-component is used in components of the system, e.g. interconnect at the different levels (up to the packaging level) and  
10 includes all relevant parameters with their physical constraints. If certain parameters do not play a significant role at the system level exploration, they can be left out of the exploration. But then they should preferably be fixed on the value that allows the cheapest and most reliable process technology solutions (independent of their delay or energy consequences). For the parameters that do have a large impact, the subranges of  
15 their trade-off curves, especially Pareto curves, that are appropriate for a given target domain (e.g. ambient multimedia) should be carefully selected to match design cost, process cost and reliability issues.

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